

REMARKS

Careful consideration has been given to the Official Action of August 8, 2005 and reconsideration of the application as amended is respectfully requested.

Specification

The specification has been amended to overcome the objection raised by the Examiner.

Claim Objections

The claims have been amended to overcome the Examiner's objections. Also claim 4 and 13 have been cancelled. Numerals in the claim have been placed in parenthesis. The claims are deemed to be in compliance with 35 U.S.C. 112.

Claim Rejections Under 35 U.S.C. 103

Claims 1-11, 15 and 19-22 are rejected under 35 U.S.C. 103(A) on Changdar et al (US 6,879,764). The patent and the application have a common inventor and common assignee. The reference is disqualified as prior art under 35 U.S.C. 103(c) in a rejection under 35 U.S.C. 103(a). See MPEP 706.02(l)(1) and 706.02 (2).

Nevertheless, there are patentable differences between the cited patent and the claimed invention as explained hereafter.

Comparison of the Invention

The waveguide property of the fiber in the invention differs in the following waveguide properties from the fiber in US patent (US6879764 112) are:

- The dispersion optimized fiber said in the invention has a typical effective area of $72\mu\text{m}^2$ and a minimum dispersion slope of $0.080\text{ ps/nm}^2\cdot\text{km}$ over the said wavelength regions that is 1530-1625nm whereas dispersion shifted fiber in patent (US6879764 B2) has a typical effective area of $50\mu\text{m}^2$ and dispersion slope less than about $0.05\text{ ps/nm}^2\cdot\text{km}$ over wavelength regions 1530-1625nm.
- Chromatic dispersion of said fiber in the invention 4.0 to 11 ps/nm*km over the operating wavelength 1565 to 1625 nm (L-band) wavelength whereas Chromatic dispersion of said fiber in (U56879764 B2) is about 3.9 to 8.6 ps/nm*km over the wavelength of 1565 to 1625 nm (L- band).
- The dispersion optimized fiber in the invention with high effective or spot area is developed for high power carrying capacity for long distance i.e. transmission of higher bandwidth over longer distance while the dispersion shifted fiber in (US6879764 B2) has low dispersion slope in the entire C and I. range (1530nm - 1625nm), is suitable transfer bandwidth uniformly over the entire C and I band.

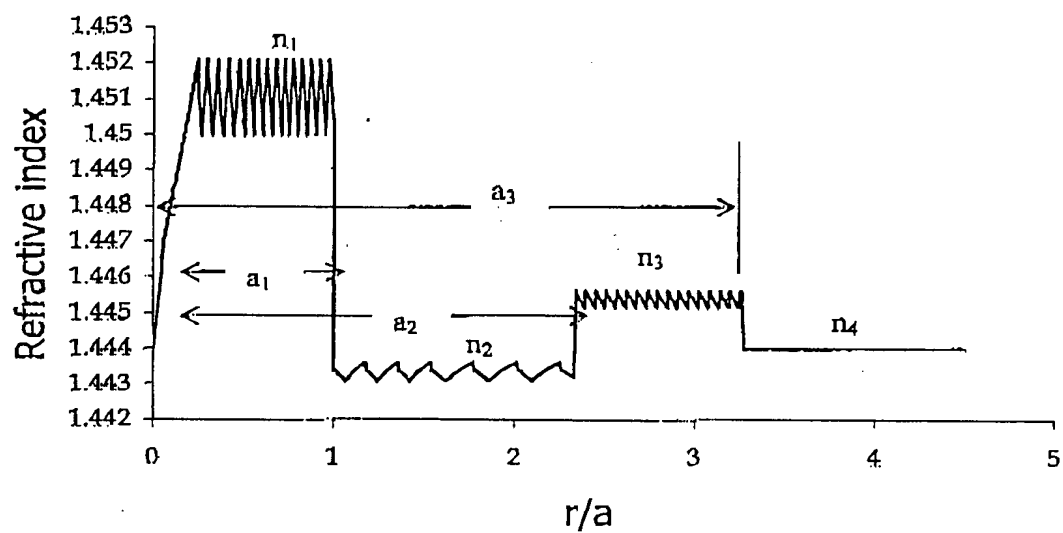
The above mention differences in waveguide properties between said two different fibers are achieved by having the following different profile parameters and shapes.

- The profile design disclosed in the invention consists of two different designs, the first one has a single depressed cladding region with center core region and outer Ring core region, the second refractive index design consists of two depressed cladding region formed by dividing the initial single cladding region and the ring core region. Is disposed in between the divided cladding region. The divided cladding region prior to ring core is called an inner cladding region, while the cladding region after ring core is called an outer cladding region.
- The refractive Index profile design disclosed in patent (US6879764 B2), consists of two different profile designs, the first one consists of two depressed claddings in continuation with center core and ring core, named as first cladding and second cladding. The second refractive index design consists of two depressed claddings from the previous design in addition two ring cores in continuation named as first ring core and second ring core are provided.

The difference in refractive index profile shape of said fiber in the invention with said fiber in US Patent (US6879764 02) is shown below.

Refractive index profile of said fiber in the invention.

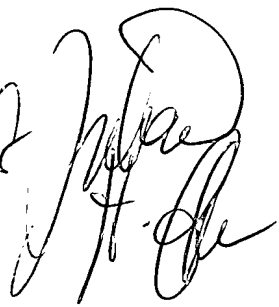
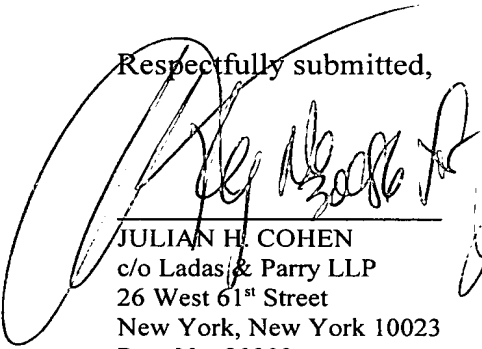
Figure 1



It is therefore respectfully submitted that all the claims in the application are allowable including claims 12-14 and 16-18 already indicated as allowable.

Favorable reconsideration is therefore earnestly solicited.

Respectfully submitted,



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